

8

**Notice of Allowability**

Application No.

09/765,981

Examiner

Benjamin R. Bruckart

Applicant(s)

SHETH, PURNAM ANIL

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Request for Consideration filed 6-2-05.
2. ☒ The allowed claim(s) is/are 2-8, 26-32, 50-56, 74-80 and 97-120 are renumbered as 1-52.
3. ☒ The drawings filed on 19 January 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 20050602
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20050816
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Sharat Barot*  
**SHARAT BAROT**  
**PRIMARY EXAMINER**

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview and email with Marc Hanish on 8/16/2005.

The application has been amended as follows:

In the claims:

27. (Currently Amended) The method ~~program storage device~~ of claim 26 wherein each said local IP address pool further comprises a low watermark that indicates the minimum number of IP addresses used by said network edge device; said determining further comprises ascertaining whether said low watermark of said address pool exceeds a low watermark limit; and said method further comprises indicating one or more IP address pools should be reallocated to reclaim IP addresses from the network element associated with said low watermark when said low watermark exceeds said low watermark limit.
28. (Currently Amended) The method ~~program storage device~~ of claim 27 wherein said reallocating further comprises:
- allocating an IP address from IP addresses reclaimed from other IP address pools when said high watermark exceeds said high watermark limit and when the number of unallocated IP addresses is insufficient;
  - allocating an IP addresses from unallocated IP addresses when said high watermark exceeds said high watermark limit and when the number of unallocated IP addresses is sufficient; and

reallocating one or more IP address pools to reclaim IP addresses from a local IP address pool when said high watermark is less than said high watermark limit and said low watermark is greater than said low watermark limit.

29. (Currently Amended) The method ~~program-storage device~~ of claim 26 wherein each said local IP address pool further comprises a low watermark that indicates the minimum number of IP addresses used by said network edge device; said determining further comprises ascertaining whether said low watermark of said address pool exceeds a low watermark limit; and said method further comprises indicating one or more IP address pools should be reallocated to reclaim IP addresses from the network element associated with said low watermark when said low watermark exceeds said low watermark limit.
30. (Currently Amended) The method ~~program-storage device~~ of claim 27 wherein said low watermark is expressed as a percentage of allocated IP addresses; and said high watermark is expressed as a percentage of allocated IP addresses.
31. (Currently Amended) The method ~~program-storage device~~ of claim 30 wherein said network operates according to a simple network management protocol (SNMP).

Art Unit: 2155

32. (Currently Amended) The method ~~program storage device~~ of claim 31 wherein  
said low watermark is stored in an expression MIB; and  
said high watermark is stored in an expression MIB.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

Claims 2-8,26-32,50-56,74-80 and 97-120 renumbered to claims 1-52 are allowable over the prior art of record.

The examiner has found that the prior art of record does not teach or suggest or render obvious a system a system, method, apparatus or program storage device managing IP addresses for allocating and reallocation comprising: requesting usage data from local IP pools and using high watermarks and low watermarks of the pool to indicate measurement of a maximum and minimum of the number of IP addresses used by the network edge device in updating one or more of the local IP address pool databases and a global IP pool database based usage data and thresholds being reached in a data communications environment.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **CORRESPONDANCE INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number 571-272-3982. The examiner can normally be reached on 8:00-5:30 PM with every other Friday off.

Art Unit: 2155

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-3982.

Benjamin R Bruckart  
Examiner  
Art Unit 2155  
brb

*brb*

*Bharat Barot.*  
BHARAT BAROT  
PRIMARY EXAMINER